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67167-003; 5706-03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Eugenio Mannella Group Art Unit: 3676
Serial No.: 10/797,884 Examiner: Barrett, Suzanne Lale Dino
Filed: 03/10/2004
Title: UNIVERSAL LOCK CYLINDER
M/S After Final
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

BEST AVAILABLE COPY**APPEAL BRIEF**

Dear Sir:

In response to the Notice of Non-Compliant appeal Brief dated November 20, 2006, Appellant now submits its substitute Appeal Brief. Appeal Brief fees have already been paid. Fees for a one-month extension of time may be charged to Deposit Account No. 50-1482. Any additional fees or credits may be charged or applied to the same Deposit Account.

Real Party in Interest

The real party in interest is Newfrey, LLC, a subsidiary of The Black & Decker Corporation and assignee of the present invention.

Related Appeals and Interferences

There are no related appeals or interferences.

Status of Claims

Claims 1-24 are pending and rejected.

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Status of Amendments

Appellant's proposed amendments to the claims and specification filed on 16 February 2006 were not entered.

Summary of Claimed Subject Matter**Summary of Independent Claim 1**

Independent claim 1 is directed to a lock core assembly (14) that includes a barrel (30) which defines an axis and a plug (32) that is mountable for rotation within the barrel (30) for rotation around the axis relative to the barrel (30). The plug (32) includes a rear segment (40) which defines a first plane (P_1) that is parallel to a second plane (P_2). The first plane (P_1) and the second plane (P_2) are offset along the axis. A first engagement member (44) is at least partially within the first plane (P_1) and a second engagement member (46) is at least partially within the second plane (P_2), with the first engagement member (44) being perpendicular to the second engagement member (46). [See Specification page 4, paragraphs 26 and 27; page 5, paragraph 34; Figures 6, 7, and 13]

Summary of Independent Claim 11

Independent claim 11 is similar to claim 1, but additionally recites a lock housing (12) and that the plug (32) includes a male rear segment (44, 46). The claim also recites a torque blade (38) that includes a female end (52) engageable with the male end (44, 46), and a retainer (42) axially retaining the female end (52) over the male end (44, 46). [See Specification page 4, paragraphs 26, 29, and 30; Figure 8]

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Summary of Independent Claim 17

Independent claim 17 is similar to independent claim 1, but additionally recites a spindle (60) that includes a female end (62) with opposed cams (66) engageable with the male rear segment (40). [See Specification page 5, paragraphs 31-33; Figures 11-13]

Grounds of Rejection to be Reviewed on Appeal

- A. Claims 3, 10, 14 and 17-24 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement.
- B. Claims 1, 4, 5-7, 9, 10-13, 15-19, and 21-23 are rejected under 35 U.S.C. §102(b) as being anticipated by *Neary* (4,068,510).
- C. Claims 1-3, 5-7, 9, 11-14, 16-20, 22, and 23 are rejected under 35 U.S.C. §102(b) as being anticipated by *Deckert* (4,444,033).
- D. Claims 8 and 24 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Neary* or *Deckert* in view of *Jacobi* (2,348,135).

Argument

A. Rejection Under 35 U.S.C. §112, First Paragraph

The Examiner argues that claims 3, 10, 14, and 17-24 fail to comply with §112, First Paragraph because the claims contain subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains to make and use the invention. The Examiner argues that Appellant's description and Figures 11 to 13 are confusing and not clearly understood.

Appellant respectfully disagrees that the description and drawings would be confusing to one of ordinary skill in the art. It seems that the Examiner is confusing the embodiment from Figures 1-10 with the different embodiment shown in Figures 11-13. For example, the rejection

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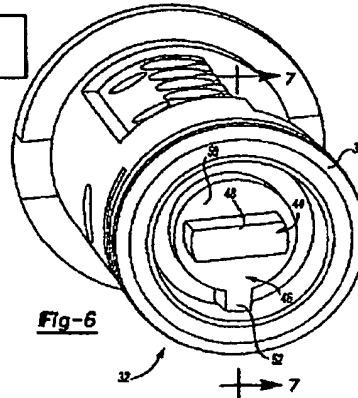
(Final Office Action, page 5) states that it unclear "how the torque blade 38 fits into the spindle assembly 60." However, as set out explicitly in the Specification (see paragraphs 23 and 31, for example), the core assembly 14 is a universal core assembly that can be mounted into various different lock housings. To illustrate the universality, the Specification and figures disclose two different types of lock housings -- a deadbolt assembly and a lever/knob assembly. Figures 1-10 and the corresponding description disclose the deadbolt assembly wherein the core assembly 14 is engageable with the torque blade 38. Figures 11-13 and the corresponding description disclose the lever/knob assembly, wherein the core assembly 14 is engageable with the spindle assembly 60. The introduction of Figure 11 (see paragraph 31) even states that Figure 11 illustrates a different type of lock housing. Therefore, because the Specification explicitly states that the core assembly 14 has universal utility with different lock housings and explicitly distinguishes between the example lock housings, the application would be clear to one of ordinary skill in the art. Thus, contrary to the Examiner's understanding, it is unnecessary to show how the torque blade 38 and spindle assembly 60 fit together because these components correspond to different types of lock housings to illustrate the universality of the core assembly 14, and are not meant to fit together. Accordingly, the rejection should be withdrawn.

Regarding claim 3, the Examiner further argues that it is unclear how to the stop 52 can define an outer diameter. Appellant's written description (see Amendment filed October 31, 2005, paragraph 28) and Figure 6 (reproduced below for convenience) clearly allow persons of ordinary skill in the art to recognize that Appellant invented what is claimed. As illustrated in Figure 6, the second engagement member 46 includes a circular member 50 and the stop 52, which extends from the circular member 50 to define an outer diameter as recited in claim 3. In the example, the stop 52 defines the outer diameter even though the stop 52 itself is not circular. Claim 3 does not recite that the stop 52 is circular, as the Examiner appears to think. Indeed, the stop 52 defines the outer diameter by providing an outer boundary for an imaginary circle around the stop 52 and coaxial with the circular member 50. Thus, the stop 52 defines the outer diameter as recited in claim 3. Accordingly, Appellant respectfully requests that the rejection be withdrawn.

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Application Figure 6



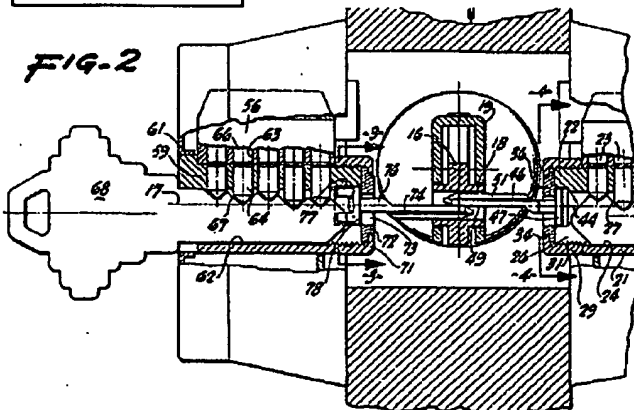
Regarding claims 14 and 20, the Examiner argues that it is unclear how the second engagement member 46 can have a diameter or define a diameter. Claims 14 and 20 refer generically to the stop 52 as the second engagement member and recite that the second engagement member defines at least a portion of an outer diameter. As explained above, Figure 6 and Appellant's written description clearly describe how the stop 52 defines at least a portion of the outer diameter. Accordingly, the rejection should be withdrawn.

B. §102(b) Rejection Over Neary

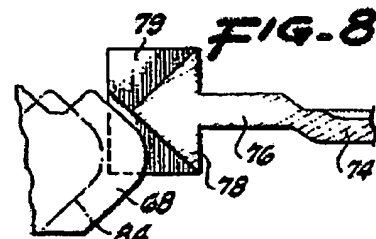
Independent Claims 1, 11, and 17

The Examiner rejected claims 1, 4, 5-7, 9, 10-13, 15-19, and 21-23 under 35 U.S.C. §102(b) as being anticipated by *Neary*. The Examiner contends that *Neary* discloses an assembly having a plug 59, a rear male segment comprising an end of a key 68 shown in Figure 8 (reproduced below), and spindle rods 49 and 74 that receive the key 68.

Neary Figure 2



Neary Figure 8



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Respectfully, the Appellant disagrees with the Examiner's interpretation. Independent claim 1 recites said plug comprising a rear segment which defines . . . a first engagement member . . . and a second engagement member. Independent claim 11 recites a plug comprising a male rear segment and a torque blade comprising a female end engageable with the male end. Independent claim 17 recites a plug comprising a male rear segment and a spindle comprising a female end engageable with the male rear segment. It is improper for the Examiner to interpret the end of the key 68 of *Neary* as a plug mountable for rotation about an axis relative to the barrel. *Neary* specifically recites that the plug is reference numeral 59 [See col. 4, line 23]. While it is well settled that the terms in the claim are to be given the broadest reasonable interpretation in proceedings before the PTO, this interpretation must be consistent with the specification, with the claim language being read in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Bond*, 910 F.2d 831, 833, 15 USPQ2d 1566, 1567 (Fed Cir. 1990); *In re Sneed*, 710 f.2d 1544, 1548, 218 USPQ 385, 388 (Fed Cir. 1983). Thus, the Examiner is suggesting an interpretation that specifically contradicts the specification of *Neary*. The plug 59 of *Neary* does not include a first engagement member and a second engagement member, or a male segment that is engageable with a female end of a torque blade or spindle as in Appellant's claims. Accordingly, the claims are properly allowable and the rejection should be withdrawn.

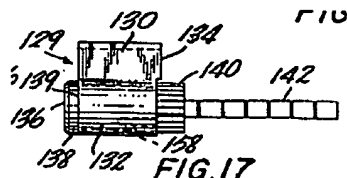
C. §102(b) Rejection Under *Deckert*

The Examiner rejected claims 1-3, 5-7, 9, 11-14, 16-20, 22, and 23 as being anticipated by *Deckert*. Here, the Examiner argues that *Deckert* discloses "a barrel and plug 132 having a rear male segment (at 139, 156, 158 in Figure 18) with a first engagement member (at 139) and second perpendicular engagement member 156 and a spindle rod 142 having a female end 144, 146, 152 (female end is hole and 152 which receives male pin member 156)."

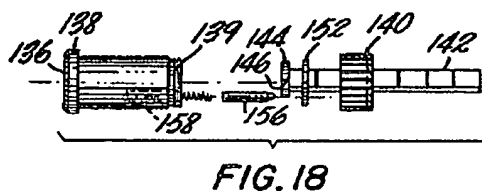
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Deckert Figure 17



Deckert Figure 18



Respectfully, as seen in Figure 17, this interpretation has no basis. Although the Examiner interprets the plug as element 132, element 132 is actually the lower cylindrical portion 132 of exterior body 130. [Col. 6, lines 23-24.] As such, what the Examiner interprets as the plug is properly interpreted as the barrel within which the plug is mountable for rotation. Indeed, *Deckert* specifically identifies the plug as element 136 [see col.6, line 20], which further supports Appellant's interpretation. All claims are allowable for this reason alone.

D. §103(a) Rejection Over *Neary* or *Deckert* in View of *Jacobi*

Claims 8 and 24 were rejected under 35 USC §103(a) as being unpatentable over *Neary* or *Deckert* in view of *Jacobi*. The improper interpretations of *Neary* and *Deckert* as described above cannot be rectified through combination with *Jacobi*. The rejections of claims 8 and 24 are therefore improper for at least the reasons discussed above even if the combination itself - - which it is not - - were proper. Claims 8 and 24 are properly allowable and the rejection should be withdrawn.

Additionally, there is no motivation to make the proposed combination of references. The Examiner argues that it would have been obvious to modify the retainer of either *Neary* or *Deckert* to have a frustum-conical shaped retainer as taught by *Jacobi* as an obvious matter of design choice to prevent tampering by providing an anti-drill sloped surface. Respectfully, Appellant submits that the proposed modification amounts to more than a mere design choice because the modification would change the operation of the base references. For example, in

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Neary, the retainer 71 would not thread onto the plug 59 if the retainer 71 had a frustum-conical shape (see *Neary* Figure 2 on page 7 herein). In *Deckert*, the cutouts 162 of the retainer 140 would be spaced from the tail cam 142 [see col. 6, lines 42-52] and therefore would not engage with the retainer 140 if the retainer 140 had a frustum-conical shape. Therefore, the proposed modifications would change the operation of the references, and thereby entail more than mere arbitrary design choice decision-making.


Additionally, the Examiner argues that the proposed modifications would provide an anti-drill sloped surface. The Examiner provides no basis that the frustum-conical shape of the retainer would provide such a benefit. Furthermore, the Examiner appears to merely be stating a desired result rather than a legitimate reason for modifying the retainers of *Neary* and *Deckert*. For this additional reason, the rejection should be withdrawn.

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CLOSING

For the reasons set forth above, the final rejection of claims 1-24 is improper and must be reversed.

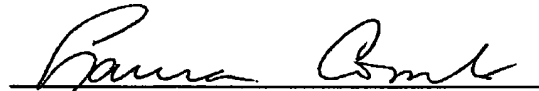
Respectfully submitted,


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Dated: January 22, 2007

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I hereby certify that this correspondence is being facsimile transmitted to the United States patent and Trademark Office, fax number (571) 273-8300, on January 22, 2007.


Laura Combs

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CLAIMS APPENDIX

1. A lock core assembly comprising:
a barrel which defines an axis; and
a plug mountable for rotation within said barrel for rotation around said axis relative said barrel, said plug comprising an rear segment which defines a first plane parallel to a second plane, said first plane and said second plane transverse and offset along said axis, a first engagement member at least partially within said first plane and a second engagement member at least partially within said second plane, said first engagement member perpendicular to said second engagement member.
2. The lock cylinder assembly as recited in claim 1, wherein said second engagement member comprises a stop that extends from a circular member defined at least partially around said axis, said circular member located at least partially within said second plane.
3. The lock cylinder assembly as recited in claim 2, wherein said circular member defines an inner diameter and said stop extends from said circular member transverse to said axis to define at least a portion of an outer diameter.
4. The lock cylinder assembly as recited in claim 1, wherein said rear segment is recessed within said plug.
5. The lock cylinder assembly as recited in claim 1, wherein said plug defines a groove.
6. The lock cylinder assembly as recited in claim 5, further comprising a torque blade comprising a female end engageable with said rear segment.

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7. The lock cylinder assembly as recited in claim 6, further comprising a retainer mountable at least partially within said groove, said retainer axially retaining said torque blade to said rear segment.

8. The lock cylinder assembly as recited in claim 7, wherein said retainer is frustum-conically shaped.

9. The lock cylinder assembly as recited in claim 1, further comprising a spindle comprising a female end engageable with said rear segment.

10. The lock cylinder assembly as recited in claim 9, further comprising opposed spindle cams within said female end.

11. A lock assembly comprising:

- a lock housing;
- a barrel which defines an axis, said barrel mountable within said housing;
- a plug mountable for rotation within said barrel for rotation around said axis relative said barrel, said plug comprising a male rear segment;
- a torque blade comprising a female end engageable with said male end; and
- a retainer axially retaining said female end over said male end.

12. The lock assembly as recited in claim 11, wherein said male rear segment comprises a first engagement member perpendicular to a second engagement member.

13. The lock assembly as recited in claim 12, wherein first engagement member is axially displaced from said second engagement member.

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14. The lock assembly as recited in claim 11, wherein said second engagement member extends from a circular member, said circular member defines an inner diameter and said second engagement member extends from said circular member transverse to said axis to define at least a portion of an outer diameter.

15. The lock assembly as recited in claim 11, wherein said male end is recessed within said plug.

16. The lock assembly as recited in claim 11, wherein said retainer engages a groove defined about said plug.

17. A lock assembly comprising:

a lock housing;

a barrel which defines an axis, said barrel mountable within said housing;

a plug mountable for rotation within said barrel for rotation around said axis relative said barrel, said plug comprising a male rear segment; and

a spindle comprising a female end with opposed cams engageable with said male rear segment.

18. The lock assembly as recited in claim 17, wherein said male rear segment comprises a first engagement member perpendicular to a second engagement member.

19. The lock assembly as recited in claim 18, wherein first engagement member is axially displaced from said second engagement member.

20. The lock assembly as recited in claim 17, wherein said second engagement member extends from a circular member, said circular member defines an inner diameter and said second

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engagement member extends from said circular member transverse to said axis to define at least a portion of an outer diameter.

21. The lock assembly as recited in claim 17, wherein said male end is recessed within said plug.

22. The lock assembly as recited in claim 17, further comprising a retainer mountable to said male rear segment, said retainer axially retaining said spindle to said male rear segment.

23. The lock assembly as recited in claim 17, further comprising a retainer mountable to said male rear segment, said retainer mounted at least partially around said female end to axially retaining said spindle to said male rear segment.

24. The lock assembly as recited in claim 22, wherein said retainer is a frustum-conically shaped retainer.

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EVIDENCE APPENDIX

None.

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RELATED PROCEEDINGS APPENDIX

None.

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